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(54) Title: NANOSTRUCTURES

(57) Abstract: The present invention relates to nanotubes and in particular to a process and apparatus for the preparation of nanotubes. In particular, the present invention relates to nanotubes which are made from materials other than carbon or nanotubes containing carbon but which would not ordinarily be classed as carbon nanotubes on account of their low carbon content. The nanostructures of the present invention have a number of applications such as: ionic conductors/battery components, hydrogen storage, templating nanowires, electrical devices, catalysis and synthesis, flat screen technology, and mechanical applications.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C01B21/06 C01B3/00 CO1B31/30 C01B33/06 C01B35/04 According to International Patent Classification (IPC) or to both mational classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 CO1B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, CHEM ABS Data, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Retevant to daim No. Citation of document, with indication, where appropriate, of the relevant passages X US 6 398 125 B1 (JANG BOR ZENG ET AL) 12 4 June 2002 (2002-06-04) claims 6,9 14 US 4 234 554 A (MUELLER GERTRAUDE ET AL) X 18 November 1980 (1980-11-18) column 3, line 3 - line 12; claims 4,5 14,15 X US 2 488 054 A (DAVIS LEWIS W) 15 November 1949 (1949-11-15) column 3, line 12 - line 59; claims US 2 910 347 A (ESMAY DONALD L) 27 October 1959 (1959-10-27) Α 12,14 column 3, line 50 - line 55 -/--175 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the levention. "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is clied to establish the publication date of another cliation or other special reason (as specified) document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. O document referring to an oral disclosure, use, exhibition or "P" document published prior to the international filing date but later than the priority date claimed *&* document member of the same patent family Date of mailing of the International search report Date of the actual completion of the international search 6 July 2004 12/07/2004 Name and malling address of the ISA Authorized officer European Peterti Office, P.B. 5818 Patentitian 2 NL – 2260 HV Rijswijk Tel. (431–70) 340–2040, Tx. 31 651 epo nl, Fax: (431–70) 340–3018 Zalm, W

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